

Frequently Asked Questions

about

the Mau Forests Complex

(Version 1 – 2 November 2009)

**A compilation prepared by:
The Interim Coordinating Secretariat
Office of the Prime Minister**

FAQ - *importance*

Frequently asked questions about the importance of the Mau

1. Why is the Mau important for our environment?
 2. Why is the Mau important for our economy?
 3. Is the Mau important for achieving Vision 2030?
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1. Why is the Mau important for our environment?

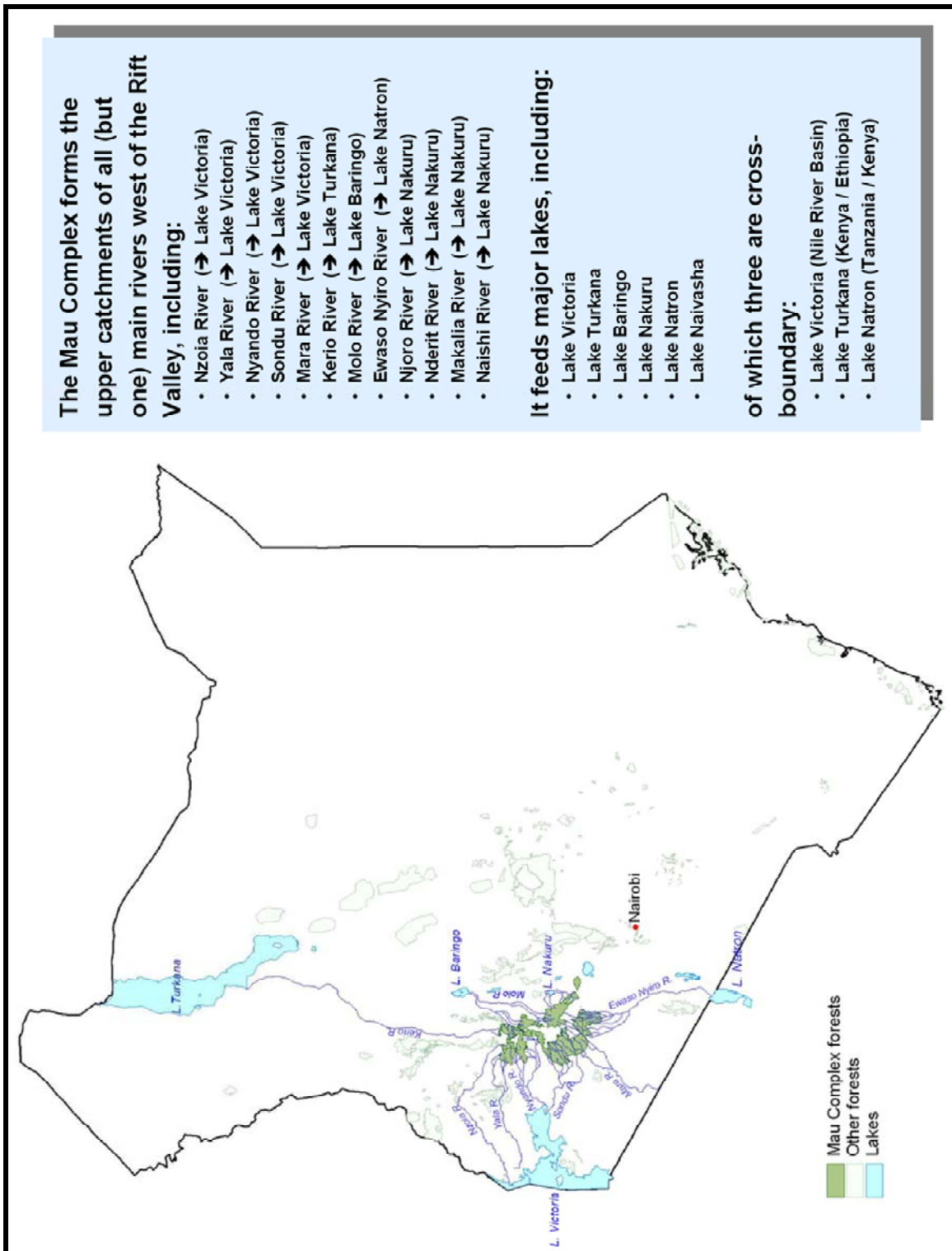
The Mau Forests Complex is a critical water catchment (see Map 1):

- It is the largest of the five “water towers” of Kenya, the others being Mt. Kenya, Aberdares, Cherangani Hills and Mt. Elgon;
- It forms part of the upper catchments of all (but one) main rivers on the west side of the Rift Valley, including Nzoia, Yala, Nyando, Sondu, Mara, Ewaso Ngiro (south), Naishi, Makalia, Nderit, Njoro, Molo and Kerio;
- It provides water to six major lakes, i.e. Victoria, Turkana, Baringo, Naivasha, Nakuru and Natron, of which three are cross-boundary lakes.

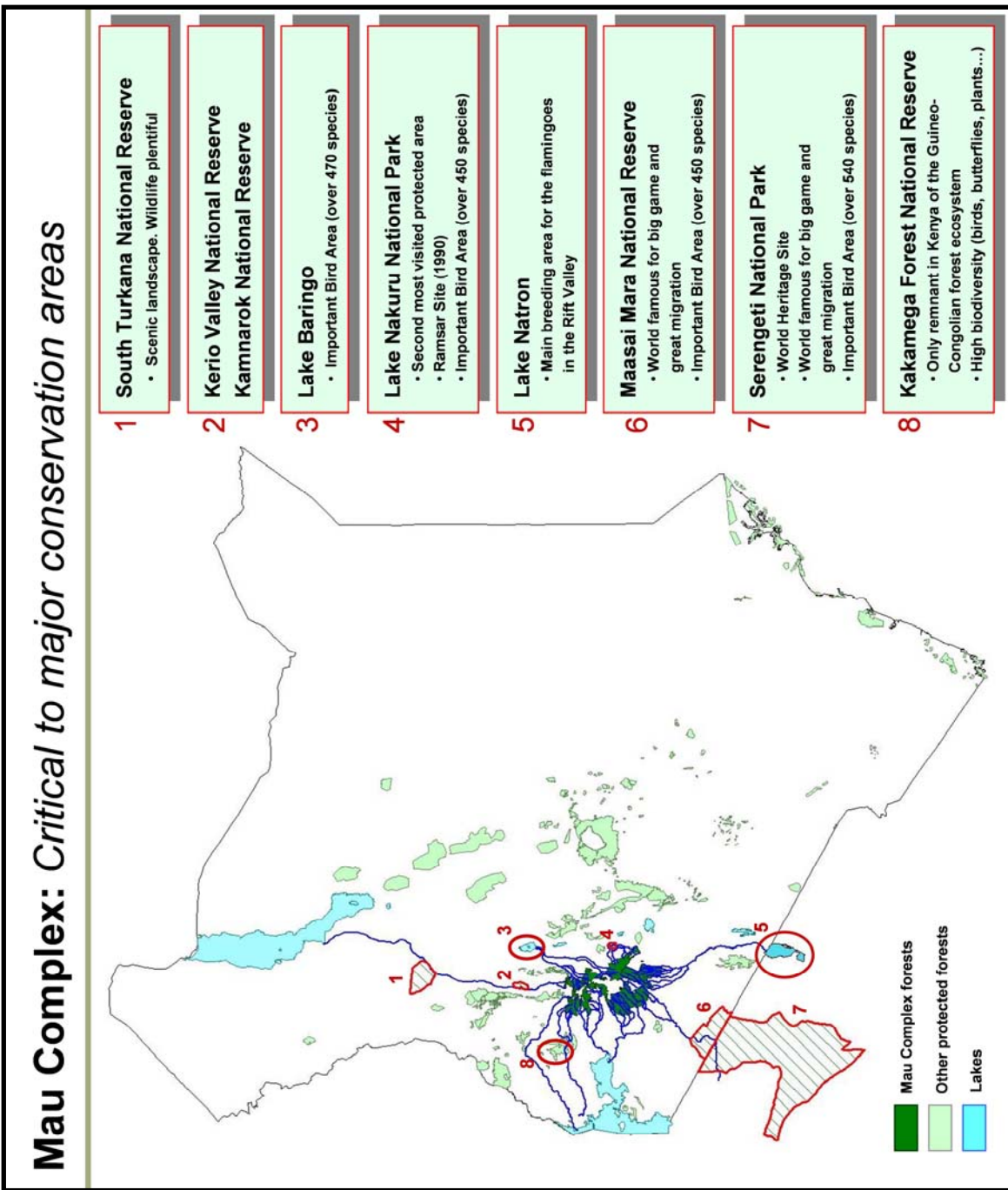
The Mau Forests Complex provides invaluable ecological services, in terms of:

- River flow regulation;
- Flood mitigation;
- Water storage;
- Recharge of groundwater;
- Reduced soil erosion and siltation;
- Water purification;
- Promoting biodiversity;
- Micro-climate regulation; and,
- Nutrient cycling and soil formation.

Through these services, the Mau Forests Complex helps sustain many natural habitats in the lower catchments. These natural habitats include key conservation areas, such as Maasai Mara National Reserve and Lake Nakuru National Park; Kakamega National Reserve; Kerio Valley National Reserve; South Turkana National Reserve; Lake Baringo; and Lake Natron (see Map 2).



Map 1: Mau Forests Complex: a key water tower



Map 2: Mau Forests Complex: critical water catchments to major conservation areas

These conservation areas host a high diversity of fauna and flora. For example, three of them – Kakamega, Baringo, and Natron - are classified as *Important Bird Areas*¹, Kakamega and Baringo hosting each over 450 bird species, while Natron is the main breeding area for the Lesser Flamingos in the Rift Valley. Other *Important Bird Areas* that depend on rivers flowing from the Mau Complex include: Koguta Swamp (Kenya – Sondu River); Kusa Swamp (Kenya – Nyando River); Serengeti National Park (Tanzania – Mara River), Mara Bay and Masirori Swamp (Tanzania – Mara River).

2. Why is the Mau important for our economy?

The environmental services provided by the Mau Forests Complex support key economic sectors, including: energy, tourism, agriculture (cash crops, subsistence crops, and livestock) as well as water supply to urban centres and industries.

The market value of goods and services generated annually in the tea, tourism and energy sectors alone to which the Mau Forests Complex has contributed, is in excess of Kshs 20 billion. This does not reflect provisional services such as water supply to urban areas (Bomet, Egerton University, Elburgon, Eldama Ravine, Kericho, Molo, Nakuru, Narok, and Njoro) or support to rural livelihoods, in particular in the Lake Victoria basin outside the tea growing areas. This figure also does not reflect potential economic development in the catchments of the Mau Forests Complex, in particular in the energy sector. The estimated potential hydropower generation in the Mau Complex catchments is approx. 508 megawatts, representing 41% of the current total electricity generation capacity in Kenya.

In addition the above mentioned services, the Mau Forests Complex provide goods, such as timber, to the forestry sector, as well as firewood, medicinal plants and fodder to the forest adjacent communities.

Energy sector

Over 57 % of Kenya’s total electricity output is generated by hydropower plants. Hydropower generated electricity is the cheapest and one of the most environment-friendly sources of energy.

The potential of hydropower generation on rivers that have predominantly their upper catchments in the Mau Complex has been estimated at 508 megawatts, a potential that represents 41 % of the total current installed capacity. Among the rivers flowing the

¹ *Important Bird Areas* are key sites for conservation that have been identified based on globally defined criteria: 1) hold significant numbers of one or more globally threatened bird species; and/or 2) are one of a set of sites that together hold a suite of restricted-range bird species or biome-restricted bird species; and/or 3) have exceptionally large numbers of migratory or congregatory bird species.

Mau Complex, the Sondu River and the Ewaso Ngiro River have the largest hydropower potential estimated at 209 and 220 megawatts respectively.

A number of sites in the Mau Forests Complex catchments have already been developed, are currently being developed or proposed. The Sondu-Miriu Hydropower Scheme with an electricity generation capacity of 60 megawatts (MW) has been recently completed on the Sondu River - the upper catchment of which is South West Mau Forest Reserve. The Sondu-Miriu Scheme was financed with support of the Japan Bank for International Cooperation and costed Kshs 15 billion (USD 238 million). The Sang'oro Hydropower Scheme, an extension of the Sondu-Miriu Scheme, is currently under implementation. It will have a capacity of 21.4 megawatts. The estimated investment will be around Kshs 3.4 billion (USD 54 million). On the same river further downstream, the Magwagwa Multipurpose Dam Scheme with an anticipated capacity of 94.6 megawatts has also been proposed. In the large tea estates around Kericho, small hydropower plants have been installed on the tributaries of the Sondu River, generating 4 megawatts. In addition, a recent feasibility study has assessed the hydropower generation potential and economic viability of four sites in the Nandi Highlands. The potential capacity of those four sites is estimated at 9.5 megawatts.

The total capacity of these developed, currently being developed and proposed hydropower plant sites in the Mau Complex catchments is estimated at 189.4 megawatts with an average annual energy production of 960 gigawatts-hour. The sale value of the average energy production on these sites will be in the range of Kshs 10 billion per year. In order to secure the installed hydropower capacity and the yet to be developed potential of the Mau Complex catchments, it is imperative to secure and conserve their forests.

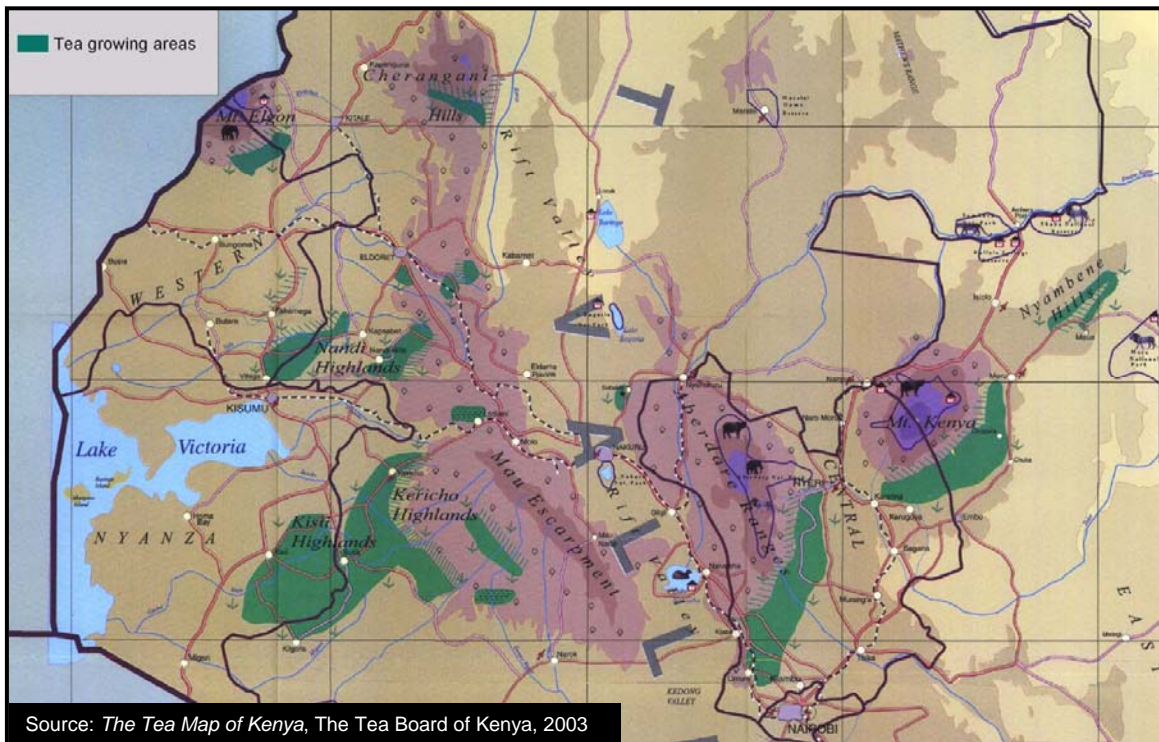
Tourism sector

Over the past years, the tourism industry has been one of the first three largest foreign currency earners for the country. In 2007, consolidated earnings from tourism amounted to Kshs 65.4 billion. It is also a major source of employment providing at least 400,000 jobs in the formal sector and over 600,000 in the informal sector.

The rivers flowing from the Mau Complex are the lifeline for major tourism destination areas including: Maasai Mara National Reserve and Lake Nakuru National Park. In 2007, the revenue from the entry fees alone amounted to Kshs 650 million and Kshs 513 million for the Maasai Mara and Lake Nakuru respectively. The annual indirect revenues from tourism in those two conservation areas are estimated to be in excess of Kshs 5 billion.

Agriculture sector – cash crops

One of the main cash crops grown in Kenya is tea. Across the country, tea growing areas are located near montane forests. Indeed, for optimum tea growth, three climatic conditions must be met: constant moisture, soil temperature between 16 and 25 °C and air temperature between 10 and 30 °C. These climatic conditions are found in areas adjacent to forests (see Map 3).



Map 3: Tea growing areas and montane forests

West to the Rift Valley, the tea growing areas are located in the Kericho Highlands, Kisii Highlands, Nandi Highlands, Cherangani Hills and Mt. Elgon. The 2009 sale value of the tea from western Kenya is estimated at Kshs 15.2 billion. In western Kenya, the tea sector provides jobs to 50,000 persons and a livelihood to 75,000 small farmers, supporting both together some 645,000 dependents. It is estimated that 2/3 of the tea produced in western Kenya is growing in areas that benefit from the ecological functions of the Mau Forests Complex, including the maintenance of favourable micro-climatic conditions (constant moisture, air temperature, soil temperature).

Rice is another important cash crop that depends on the Mau Forests Complex ecological services. Indeed, about 95% of the rice in Kenya is grown under irrigation in paddy schemes. In 2006, 5,234 hectares of rice was cultivated in the deltas of the Yala and Nyando rivers of which the Mau Forests Complex forms parts of their upper catchments. The estimated 2006 market value of the rice produced in those deltas is

estimated at Kshs 1 billion. Being the third most important staple food in Kenya after maize and wheat, rice contributes significantly to food security in the country.

Agriculture sector – Subsistence livelihoods

The rivers flowing from the Mau Forests Complex cross 478 sub-locations where the total population is estimated at over 5.5 million. Directly or indirectly, a significant proportion of that population depends on the water flowing in these rivers for their subsistence livelihoods, including livestock.

People who live within five kilometres from the forests of the Mau Forests Complex depend, partially or totally, on the forests of the Mau Forests Complex for firewood, grazing and medicinal plants.

Water supply to urban areas

The Mau Forests Complex is the single most important source of water for direct human consumption, urban areas and industrial activities in Rift Valley and Western Kenya. Major urban areas depending upon the water flowing from the Mau Forests Complex include: Bomet, Egerton University, Elburgon, Eldama Ravine, Kericho, Molo, Nakuru, Narok and Njoro.

3. Is the Mau important for achieving Vision 2030?

The Mau Forests Complex secures environmental stability and provides environmental goods and services that are essential to attain sustainable development in Kenya. They are cross-cutting, underlying requirements to achieve Vision 2030 - Kenya's development blueprint aiming at making the country a newly industrializing middle income nation, providing high quality of life for all the citizens.

FAQ – *threats & impacts*

Frequently asked questions about the threats to the Mau

1. What are the main causes of the degradation of the Mau?
 2. How much of the Mau has been destroyed and or invaded?
 3. What are the impacts of deforestation in the Mau?
 4. Is the severity of the drought around the Mau due to deforestation or climate change?
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1. What are the main causes of the degradation of the Mau?

The main causes of forest loss in the Mau Forests Complex are:

- Conversion of forestland into settlements;
- Mismanagement of industrial forest plantations;
- Illegal forest resource extraction;
- Fires;
- Overgrazing.

The conversion of forestland into settlements has been the most important cause of forest loss in the Mau. The conversion occurred through forest excisions, in particular those of 2001, settlements and encroachments.

The northern blocks of the Mau Forests Complex have extensive industrial forest plantations which have replaced indigenous forests. Many of the forest plantation blocks are devoid of trees or are not managed properly. In some of the blocks, the surrounding indigenous forests are heavily degraded.

Illegal extraction of forest resources has not been fully documented. However, law enforcement operations by the joint enforcement forces established by the Mau Task Force indicate high level of illegal extraction of forest resources, in particular timber, charcoal and firewood.

2. How much of the Mau has been destroyed and or invaded?

Settlements took place through five processes, totalling 136,469 hectares:

- Encroachments (29,000 ha);
- Settlements through the 2001 excisions of forest reserves (61,587 ha);

- Settlements on trust land beyond declared adjudication section boundaries (Maasai Mau) (23,301 ha);
- *Ad hoc* requests for land allocation (2,426 ha);
- Settlements in forest reserve through land adjudication (OI Pusimoru) (20,155 ha).

Through these five processes, 110,000 to 120,000 hectares of forest cover have been destroyed or severally degraded.

3. What are the impacts of deforestation in the Mau?

The potential impacts of deforestation have not been fully assessed. No environmental Impact assessment was carried out prior to the 2001 forest excisions despite such requirements in the 1999 Environment Management and Coordination Act. However, the impacts of past extensive destruction of forest, including the 2001 excisions are already being felt. Some of the known direct impacts include:

Water resources:

- A main aquifer in Nakuru has been lowered by 100 metres in 10 years.
- The Sondu River flow is more irregular making it impossible to run the hydropower plant at full capacity in the dry seasons.
- The four main rivers feeding the Lake Nakuru were perennial – they are now seasonal.
- The Mara River level in the dry season is very low, threatening the river-dependant wildlife in the Maasai Mara and the Serengeti ecosystems.
- In Njoro area, 13 of the 32 streams have dried up completely mostly between 1996 and 2001. 27 other water sources or streams have also dried up completely in Elburgon, Kuresoi, Keringet, Kiptagich and OI Pusimoru areas.

Biodiversity:

- The Mau Forests Complex comprises a unique diversity of forest types. The lower montane forest type is in its best condition in the South Western Mau Forest Reserve, but in the other areas where this forest type occurs, it has been heavily and destructively logged. Large stands of bamboo have been excised or encroached. Substantial parts of the higher altitude Juniperus-Podocarpus-Olea forest have been encroached and cleared.
- The Mau Forests Complex together with its diverse animal and plant life forms is currently under threat.

4. Is the severity of the drought in the Mau area due to deforestation or climate change?

Drought is a recurrent natural phenomenon in East Africa. Droughts were known to occur almost every seven years. Over the decades the impacts of droughts seem to have worsened. Climate variability may be one of the culprits. But the degradation of the environment, in particular the destruction of natural habitats, such as forests and wetlands, has clearly contributed significantly to the severity of the drought impacts. Indeed, the degradation of natural habitats has reduced their ability to absorb or mitigate the impacts of drought.

Rehabilitating forest has also the potential to help address climate change, through mitigation and adaptation.

Mitigation

Over 17% of all anthropogenic greenhouse gas emissions derived from deforestation. Addressing deforestation, such as in the Mau Forests Complex, is an effective way to reduce greenhouse gas emissions and mitigate climate change.

Adaptation

Climate change is happening and will worsen over the coming decades, even if stringent measures are adopted and implemented today towards reducing greenhouse gas emissions. Adaptation to climate change is, therefore, a necessity. The rehabilitation and “boosting” of natural habitats, such as forests and wetlands, to improve their ecological integrity are effective measures to adapt to climate change.

FAQ – settlements

Frequently asked questions about settlements in the Mau

1. How many people are in the Mau?

1. How many people are in the Mau?

There are different categories of people in the Mau ranging from *bona fide* settlers to illegal squatters. The difference mainly derives from the process through which they found their way in the Mau Forests Complex. Settlements in the Mau Forests Complex fall in the following five categories:

- 1) Encroachments (illegal squatters in protected forests with no documentation);
- 2) Settlements through the 2001 excisions of forest reserves;
- 3) Settlements on trust land beyond declared adjudication section boundaries (Maasai Mau);
 - “ballooning” Group Ranches
 - Nkareta area
- 4) Settlements in gazetted forest reserve through land adjudication (OI Pusimoru);
- 5) *Ad hoc* requests for land in protected forests.

	Settlement types	Area [ha]	Estimated number of households
1	Encroachments	29,000	2,500
2	2001 forest excisions	61,587	27,523
3	Settlements on trust land (Maasai Mau) <ul style="list-style-type: none"> • “ballooning” Group Ranches • Nkareta area 	At least 17,101	2,000
		6,200	147
4	Land adjudication in gazetted forest reserve (OI Pusimoru)	20,155	1,861
5	<i>Ad hoc</i> requests	2,426	Not determined
TOTAL		136,469	34,031

Table 1: Summary of settlements in the Mau Forests Complex

FAQ – ICS

Frequently asked questions about the Interim Coordinating Secretariat

1. Why have we waited this long?
 2. Who is doing what? Which ministries are involved in the restoration of the Mau and the relocation of the people living in the forest?
 3. Is there a duplication of mandate between the ICS and other Government bodies? Is the ICS fighting for relevance?
 4. What is the time table of the ICS's Plan of action?
 5. What is the synergy plan with the people on the ground?
 6. How prepared is the ICS with regard to providing a central place of information to the media and the public?
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1. Why have we waited this long?

Environment conservation, in particular sustainable forest management, has not been among the priority areas of the previous governments. New leadership combined with an increased public awareness of the need to conserve the environment has led to forests and water catchments conservation being brought on the top of the sustainable development agenda of the Government.

In light of the complexity of issues and the large range of stakeholders involved in the Mau, the Government had to establish a Task Force to assess, build consensus and make recommendations on the rehabilitation of the Mau. The Task Force worked for a period of eight months. The report of the Task Force was approved by the Cabinet and Parliament. All together, approximately one year was needed to move from assessment to consensus building and finally to the implementation of agreed recommendations.

2. Who is doing what? Which ministries are involved in the restoration of the Mau and the relocation of the people living in the forest?

The mandate of the Interim Coordinating Secretariat is mainly to coordinate the implementation of the Mau Task Force recommendations as approved by the Cabinet and Parliament. This coordination is to ensure an orderly, systematic and timely implementation involving the relevant Government's Ministries.

The actual implementation is carried out by the relevant Ministries based on their mandate and capacity.

Some of the key Ministries directly involved in the implementation of the recommendations are: Forestry and Wildlife; Lands; Water and Irrigation; Environment and Mineral Resources; Special Programmes; Education; Provincial Administration and Internal Security and Finance. Other Ministries also involved include: Agriculture; Fisheries; Regional Development Authorities; Health; and, Local Government.

3. Is there a duplication of mandate between the ICS and other Government bodies? Is the ICS fighting for relevance?

The Interim Coordinating Secretariat has a pivotal role to play. It is the only Government body which is in charge of drawing the work programme for the implementation of the Task Force recommendations; discussing it at various levels, from ministerial to field levels, and with partners; and then ensuring a well coordinated, orderly and timely response by the Government.

It is because of the critical role that the Secretariat has to play, that the establishment of such Secretariat was among the key recommendations made by the Task Force with regard to institutional arrangements.

4. What is the time table of the ICS's Plan of action?

The plan of action of the Interim Coordinating Secretariat is based on a phased approach. The repossession of forestland comprises five phases. By mid of December 2009, phases I and II will be implemented (see Table 1). These two phases deal with forestland for which no title deeds have been issued or are still in existence. The other three phases which deal with title deeds and the delicate issues of compensation and resettlements will be implemented from early 2010 onwards.

Forest area / Forest block	Status	Area [Ha]	Occupants (approx. number)	Timeframe						
				Oct	Nov	Dec	Jan	Feb	Mar	After March
Phase I: Forestland excised but unparceled or unoccupied										
Likia Extension / Eastern Mau	Excised but vacated	530	None							
LR 25148 / Eastern Mau	Excised but not parceled	1,050	Few squatters							
Mariashoni / Eastern Mau	Excised but not parceled	2,950	Few Ogiek							
Phase II: Encroachment in gazetted forest reserves (no title deeds issued)										
South Western Mau	Gazetted Forest Reserve	19,000	1,690 families							

Table 1: Phases I and II of the plan of action for the repossession of forestland

5. What is the synergy plan with the people on the ground?

The Interim Coordinating Secretariat held two coordination and planning workshops for field officers in Nakuru. These workshops helped build a full understanding among the field officers of the issues at hand and the Government's response to address them. The field officers, in particular those from the Provincial Administration, Kenya Forest Service, Kenya Wildlife Service and Kenya Police, have been requested to inform the affected communities on the same. An information kit being developed by the Interim Coordinating Secretariat will be sent to all relevant field officers to help the process of disseminating information.

6. How prepared is the ICS with regard to providing a central place of information to the media and the public?

The Interim Coordinating Secretariat has the custody of the Mau Task Force report and the data collected by the Task Force. In addition, as the coordinator of the Government's response, the Secretariat has updated information regarding the interventions by the relevant Ministries.

The Secretariat has also technical advisers as well as consultants to provide expertise on topical issues.

In order to communicate with the media, the Interim Coordinating Secretariat has set up a Committee on Communication and Outreach comprising media and public relations experts.

Two media houses breakfast briefings have already been organized with 1) media houses' editors in Nairobi and 2) media houses' journalists based in Nakuru. These briefings were not only an opportunity to share information, but also to establish a long-term relationship between the Secretariat and the media houses.

FAQ – Phase I

Frequently asked questions about the repossession of unparcelled or unoccupied forestland in Eastern Mau Forest Reserve

1. How many hectares are being reposessed during Phase I?
 2. How many people are going to be relocated?
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1. How many hectares are being reposessed during Phase I?

During Phase I, three forest areas that were excised from Eastern Mau Forest Reserve in 2001 will be reposessed. These areas were not parcelled and/or are not occupied. The three areas are as follows:

- a) Likia Extension: 530 hectares;
- b) LR 25148: 1,050 hectares;
- c) Mariashoni: 2,950 hectares.

The total forestland area to be reposessed during Phase I is approx: 4,530 hectares.

2. How many people are going to be relocated?

Likia Extension was excised from Eastern Mau Forest Reserve in 2001. In the settlement process of Likia Extension, conflicts arose due to double registration of lands. This forced the Government to resettle the people from Likia Extension to Baraget. The Provincial Administration secured the vacated land up to the post-election violence. To date, nobody is settled in Likia Extension, although part of the area is currently cultivated by settlers living around Likia Trading Centre.

LR 25148 is located on the top of the Mau Escarpment at an altitude of over 3000 metres. It is located between Baraget and Kapsita-Elburgon Settlement Schemes. It is mainly a bamboo forest. The land was excised from Eastern Mau Forest Reserve in 2001, but has never been parcelled and allocated. Only few illegal squatters may be residing on the periphery of the area.

Mariashoni was excised in 2001 from Eastern Mau Forest Reserve in 2001. An area of Mariashoni covering approx. 2,950 hectares has never been parcelled or allocated. The land is very sparsely occupied, mainly by Ogiek. The Ogiek will be resettled by the Government in line with the Mau Task Force recommendations.

FAQ – Phase II

Frequently asked questions about the removal of illegal squatters in South Western Mau Forest Reserve

1. Encroachment in South Western Mau – what is the story?
 2. When can we expect the vacation notices?
 3. Why now when the rain is upon us?
 4. Will the activities interfere with the education of those living in the Mau?
 5. Will the activities interfere with traditional rituals?
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1. Encroachment in South Western Mau – what is the story?

In South Western Mau Forest Reserve, approximately 19,000 hectares of bamboo forest have been encroached by an estimated 1,690 families. The area is part of the upper catchments of Sondu and Mara rivers.

These families are illegal squatters. They have no documentation to support their occupation of the forest. In addition the Government has never excised that forest area or even expressed any intention to set aside that forest for settlement.

In January 2006, the illegal squatters were removed by the former Forest Department. However, lack of enforcement made it possible for the squatters to return to the forest.

2. When can we expect the vacation notices?

The Interim Coordinating Secretariat has completed the planning and coordination work for the removal of the illegal squatters on 22 October 2009. Planning meetings were held at ministerial and permanent secretary levels, as well as at field level. Two planning and coordination workshops for field officers were held in Nakuru to ensure an orderly and humane relocation of the illegal squatters.

A new notice providing 14 days to vacate the forest was issued on 26 October 2009, following the completion of the coordination and planning process led by the Interim Coordinating Secretariat.

3. Why now when the rain is upon us?

There are several reasons for removing the illegal squatters immediately:

1. Illegal squatters are continuously destroying the forest. It is, therefore, imperative to proceed with their relocation without further delay. The Mau Task Force report that was adopted by Cabinet and Parliament noted with concern the on-going destruction of forest caused by illegal squatters: *“Encroachments present a major threat to the Mau Forests Complex, not only because of their extent, but also because they expand over time, threatening the ecological stability of entire forest blocks”*. The Task Force, therefore, recommends that *“encroachers should be removed from the forests immediately”*.
2. The encroached area in South Western Mau comprised of bamboo forests. Bamboo is still to be found along the rivers in the encroached area and could regenerate if human settlements are removed from the area. The upcoming rain season that is likely to be extended due to the predicted El Nino phenomenon, provides a great opportunity to enable the regeneration of the bamboo forest.

4. Will the activities interfere with the education of those living in the Mau?

The relocation programme has been designed to minimize human suffering. It involves many ministries, including the Ministry for Education. The involvement of the Ministry of Education was necessary to minimize disruption of schooling among the children residing in the forest. To this end, the Ministry carried out a survey. The findings are:

- There are only three seasonal primary schools in the forest (Langam, Chesigar and Siratet) comprising a total of 213 pupils. They are all going up to class 4. The community has employed parents Association Teachers.
- There are no KCPE/KCSE candidates in the schools in the forests;
- School bordering the forest are operating at $\frac{3}{4}$ capacity and have the ability to absorb additional pupils should they be relocated from the forests.

In line with the above findings, it is expected that the relocation will not interfere in any significant manner with the schooling of the pupils residing in the forest.

5. Will the activities interfere with traditional rituals?

The Kalenjin community have three places of traditional worship. Age initiation ceremonies are held in forests or secluded areas. The next age-group related rituals will take place in December. The relocation process will be completed by the time these rituals are to start.

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